

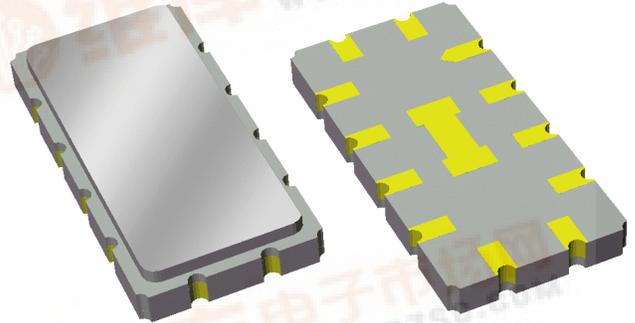


Part Number 855731 426 MHz SAW Filter

Preliminary Data Sheet

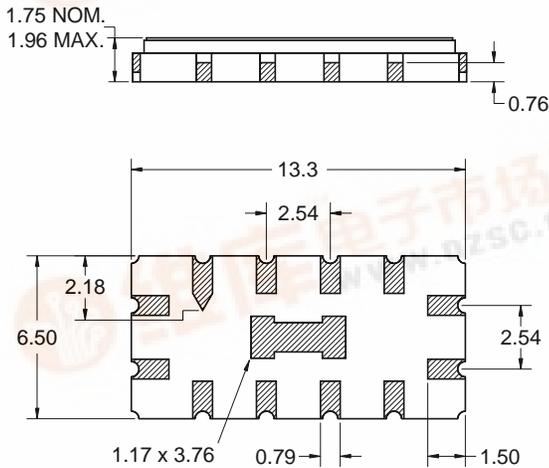
Features

- For broadband wireless access and VOFDM applications
- Usable bandwidth 5.16 MHz
- High attenuation
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size



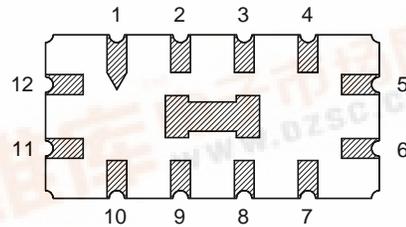
Package

Surface Mount 13.30 x 6.50 x 1.75 mm



Pin Configuration

Bottom View



Pin No.	Description
11	Input
5	Output
1,2,3,4,6	Case ground
7,8,9,10,12	Case ground

Dimensions shown are nominal in millimeters
All tolerances are ± 0.15 mm except overall length and width ± 0.10 mm

Body: Al_2O_3 ceramic

Lid: Kovar, Ni plated

Terminations: Au plating 0.5 - 1.0 μ m,
over a 2 - 6 μ m Ni plating



Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

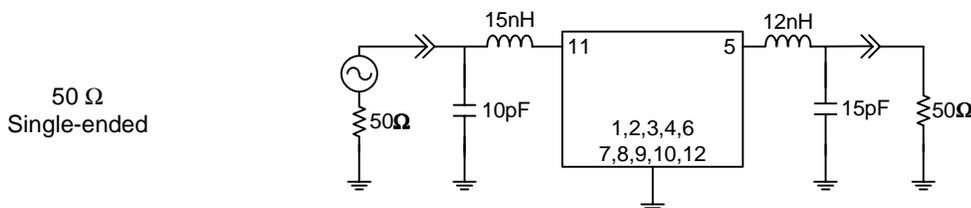
Operating Temperature Range: ⁽²⁾ 0 to +70 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	426	-	MHz
Insertion Loss at 426 MHz	-	18.02	20.5	dB
Upper 0.5 dB Point ⁽⁴⁾	428.52	428.81	-	MHz
Lower 0.5 dB Point ⁽⁴⁾	-	423.16	423.36	MHz
Upper 3 dB Point ⁽⁴⁾	-	429.25	429.65	MHz
Lower 3 dB Point ⁽⁴⁾	422.35	422.69	-	MHz
Upper 40 dB Point ⁽⁴⁾	-	430.53	430.74	MHz
Lower 40 dB Point ⁽⁴⁾	421.31	421.59	-	MHz
Upper 45 dB Point ⁽⁴⁾	-	430.70	430.89	MHz
Lower 45 dB Point ⁽⁴⁾	421.20	421.55	-	MHz
Upper 50 dB Point ⁽⁴⁾	-	432.75	433.50	MHz
Lower 50 dB Point ⁽⁴⁾	419.50	421.51	-	MHz
Relative Attenuation				
100.0 - 419.5 MHz	50	60.1	-	dB
433.5 - 500.0 MHz	50	53.2	-	dB
Phase Ripple				
423.3 - 428.7 MHz	-	3.1	10	deg p-p
Input VSWR at 426MHz	-	3.2	5.0:1	
Output VSWR at 426MHz	-	1.9	2.5:1	
Triple Transit Suppression	40	43	-	dB
Passband Ripple ⁽⁵⁾	-	0.21	0.7	dB
Source Impedance: ⁽⁶⁾	-	50	-	Ω
Load Impedance: ⁽⁶⁾	-	50	-	Ω

Notes:

- All specifications are based on the test circuit shown below
- In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- Relative to insertion loss at 426MHz
- 100% of the 1 dB bandwidth (Maximum peak to adjacent valley)
- This is the optimum impedance in order to achieve the performance shown

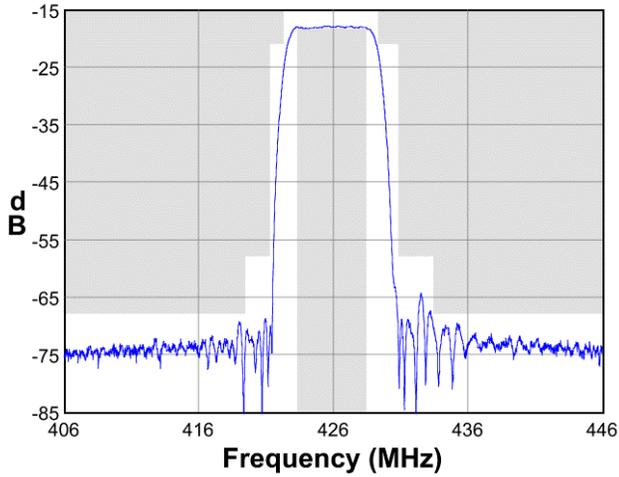
Test Circuit:



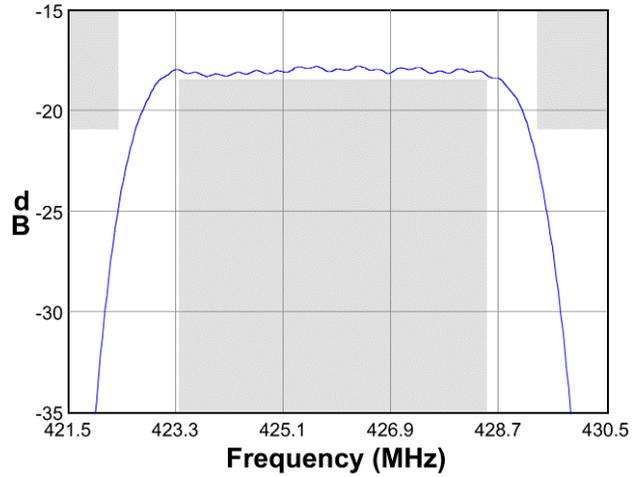
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Typical Performance (at +25°C)

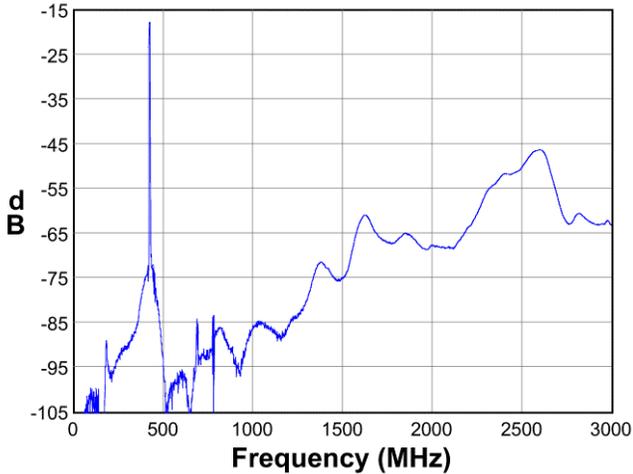
Frequency Response



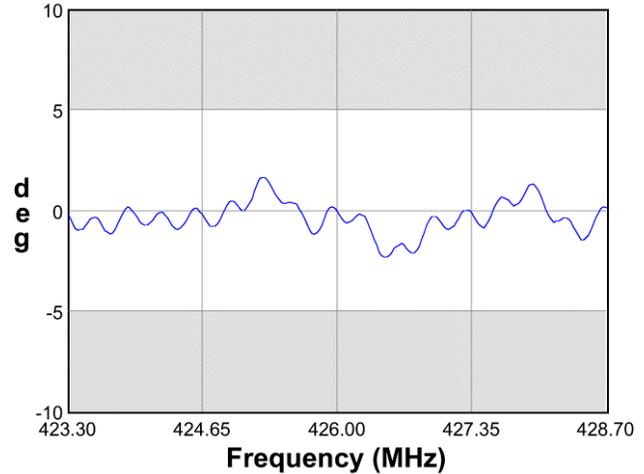
Passband Response



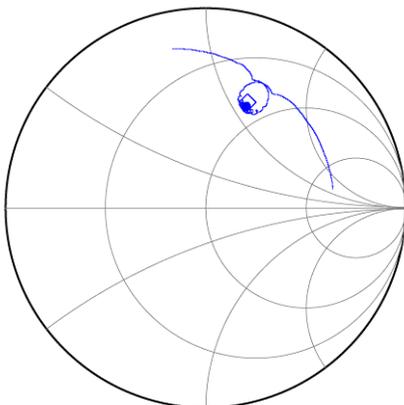
Wideband Response



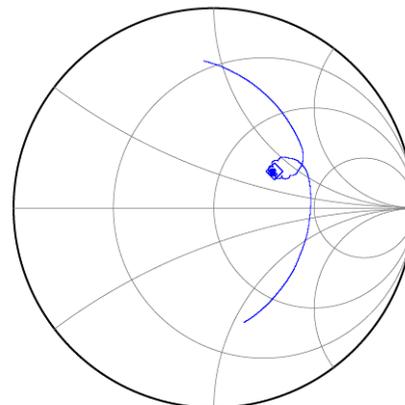
Phase Ripple



Input Smith Chart



Output Smith Chart



Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	0	+70	°C
Storage Temperature Range	T _{stg}	-40	+85	°C
RF Power	P _{in}	-	+10	dBm

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

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